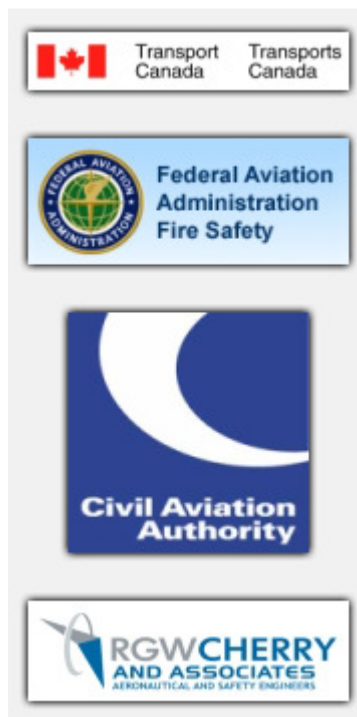


CSRTG Aircraft Accident Database

USER GUIDE

ISSUE 3



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1 Introduction

This User Guide describes the content of the CSRTG Accident Database and the operation of the menu driven system to select, view and extract data on specified accidents.

The accident database has been constructed on behalf of the Airworthiness Authorities participating in the Cabin Safety Research Technical Group (CSRTG).

The database provides simple and advanced searching and exporting facilities for all registered and unregistered users.

Registered users may store their private and individual Custom Lists, Saved Searches and Designated Accidents.

The database is freely available for use as a resource for improving aviation safety. Its production has been made possible by the financial support of the following authorities:

Transport Canada
US Federal Aviation Administration
UK Civil Aviation Authority

Disclaimer:

It should be noted that whilst every care has been taken in preparing the contents of this database, to the extent permitted by national laws, no liability for any losses incurred as a result of incorrect data generated or stored by the database is accepted by the Cabin Safety Research Technical Group (CSRTG), its member Aviation Authorities or the database constructor. It is suggested that any conclusions derived from the database are independently verified. In particular, analyses based on the database selection criteria can lead to misleading conclusions and should be independently confirmed.

2 Scope of Database

The database contains accidents¹ involving fixed wing civil registered transport passenger aircraft (with 20 or more passenger seats) and cargo aircraft; all certificated to Part 25 requirements or equivalent. The database includes textual and numerical data, as well as photographs and diagrams.

The database contains accidents from 1967 onwards and is periodically reviewed and revised.

The objective is that all information contained in the database is based on official reports from Accident Investigating Authorities or government agencies. However, for many accidents, information of this nature is not available and “unofficial” data has been included. Unofficial data is clearly annotated by curly brackets “{ }” and is displayed in red

¹ The definition for the term ‘accident’ is provided in Annex 13 to the Convention on International Civil Aviation Aircraft ‘ACCIDENT AND INCIDENT INVESTIGATION’. Note: The database also includes some incidents relevant to cabin safety.

3 Using the Database - Basic Features

3.1 Introduction

This Section of the User Guide describes the Database Structure and provides instructions for using the Basic Features.

The database contains an Accident List and individual Accident Records.

The Accident List is displayed by default when entering the database via the introductory pages.

3.2 Accident List

The accidents contained in the database are accessible via the Accident List. The list is displayed on several pages depending on its length. The page size can be adjusted up to a maximum of 50 accidents.

The list is initially sorted by the accident 'Reference' in descending order. If desired, the list may be sorted on any of the columns within the list, in descending or ascending order by clicking on the column heading. The format of the Accident List is shown below.

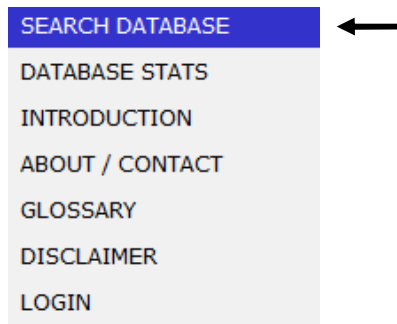
Page 1 of 197 Record 1 to 20 of 3926 Page Size 20					
REFERENCE	IDENTIFIER	AIRCRAFT TYPE	REGISTRATION	DATE	LOCATION
20091222A	?	B737-823	N977AN	22-DEC-2009	NORMAN MANLEY INTL A/P, KINGSTON, JAMAICA
20091220A	?	HS748	5Y-YKM	20-DEC-2009	TONJ AIRFIELD, SUDAN
20091207A	?	EMB135LR	ZS-SJW	07-DEC-2009	GEORGE A/P, SOUTH AFRICA
20091202A	?	F100	PK-MJD	02-DEC-2009	KUPANG-ELTARI A/P, INDONESIA
20091128A	?	MD11-F	Z-BAV	28-NOV-2009	SHANGHAI-PUDONG INTL A/P, SHANGHAI, CHINA
20091119A	?	MD82	9Q-CAB	19-NOV-2009	GOMA A/P, CONGO (DEMOCRATIC REPUBLIC OF)
20091118B	?	B777-200	N209UA	18-NOV-2009	(NEAR) NEW MARKET, WEST VIRGINIA, U.S.A.
20091118A	?	F100	EP-CFO	18-NOV-2009	ISFAHAN-SHAHID BEHESHTI A/P, IRAN
20091112A	?	CANADAIR RJ100	5Y-JLD	12-NOV-2009	KIGALI, RWANDA
20091110A	?	ATR72-212A	VT-KAC	10-NOV-2009	MUMBAI-CHHATRAPATI SHIVAJI INTL A/P, INDIA
20091102A	?	MD90	N909DA	02-NOV-2009	PHOENIX, ARIZONA, U.S.A.
20091027A	?	B767-432ER	N825MH	27-OCT-2009	ATLANTA, GEORGIA, U.S.A.
20091026A	?	B717-200	N935AT	26-OCT-2009	(NEAR) NORFOLK, VIRGINIA, U.S.A.
20091021A	?	B707-300	ST-AKW	21-OCT-2009	SHARJAH INTL A/P, SHARJAH, UNITED ARAB EMIRATES
20091017A	?	DC3C	RP-C550	17-OCT-2009	3.5 KM SW OF MANILA-NINYOY AQUINO INTL A/P, PHILIPPINES
20091005A	?	B767-3P6	N156DL	05-OCT-2009	?, ARGENTINA
20090924A	?	JETSTREAM 4121	ZS-NRM	24-SEP-2009	1.4 KM E OF DURBAN INTL A/P, SOUTH AFRICA
20090918A	?	CASA 212-CC	N349TA	18-SEP-2009	SAVOONGA, ALASKA, U.S.A.
20090914A	?	F100	D-AFKE	14-SEP-2009	STUTTGART-ECHTERDINGEN A/P, GERMANY
20090911A	?	DHC8-202	N367PH	11-SEP-2009	?, U.S.A.
Page 1 of 197 Record 1 to 20 of 3926 Page Size 20					

A condensed Accident List is displayed when using the Simple or Advanced Search functions or when using a Custom List or displaying Designated or Tagged accidents.

3.3 Displaying the 'Accident List'

The Accident List is used to navigate to individual accident records.

It may be displayed at any time whilst using the database by clicking on 'Search Database' within the main menu located at the top left hand of the screen.





3.4 Accident Records

The data stored for each accident is displayed on an Accident Record. The format of the Accident Record is shown below.

19850822A, B737-236 Sr1, G-BGJL, MANCHESTER AIRPORT, U.K., 22-AUG-1985

Controls

TEXT	PICTURES (5)	INJURY LOCATIONS (1)	EXIT USAGE (1)
EXIT & ASSIST MEANS (8)	ORIENTATION (1)	OCCUPANT DATA (139)	FLOATATION (0)
KEYWORDS (7)	LINKS (0)		

Record   1   of 2 Link to this record : <http://www.rgwcherry-adb.co.uk/adb/ADBview.asp?REF=19850822A>

ACCIDENT DETAILS	AIRCRAFT DATA	INJURY TABLE	FIRE FACTORS	IMPACT FACTORS	WATER FACTORS	ENVIRONMENT
REFERENCE	19850822A					
IDENTIFIER	MANCHESTER B737					
AIRCRAFT TYPE	B737-236 Sr1					
WEIGHT CATEGORY	C					
REGISTRATION	G-BGJL					
DATE	22-AUG-1985					
LOCATION	MANCHESTER AIRPORT, U.K.					
OPERATOR	BRITISH AIRTOURS					
OPERATION	PASSENGER					
REPORT	AAIB ACCIDENT REPORT 8/88					
NUMBER OF OCCUPANTS	137					
FATALITIES	55					
INJURIES	15					
FIRE RELATED	YES					
DITCHING RELATED	NO					
IMPACT RELATED	NO					
FUSELAGE RUPTURED	NO					
FUEL TANK RUPTURED	YES					
DAY / NIGHT	D					
RUNWAY VICINITY	YES					
PHASE OF FLIGHT	ABORTED					
OVERRUN	NO					
AIRCRAFT DAMAGE	DESTROYED					
EVACUATION	YES					

3.5 Displaying an Accident Record

Only one accident record can be displayed at a time.

To display an Accident Record, click on 'Reference' or the 'Magnifying Glass Symbol' for the chosen accident in the Accident List.

Page 1 of 4 Records 1 to 20 of 76 Page Size 20

REFERENCE	AIRCRAFT TYPE	REGISTRATION	DATE	LOCATION
20091222A	B737-823	N977AN	22-DEC-2009	NORMAN MANLEY INTL A/P, KINGSTON, JAMAICA
20091220A	HS748	5Y-YKM	20-DEC-2009	TONJ AIRFIELD, SUDAN
20091207A	EMB135LR	ZS-SJW	07-DEC-2009	GEORGE A/P, SOUTH AFRICA
20091202A	F100	PK-MJD	02-DEC-2009	KUPANG-ELTARI A/P, INDONESIA
20091128A	MD11-F	Z-BAV	28-NOV-2009	SHANGHAI-PUDONG INTL A/P, SHANGHAI, CHINA
20091119A	MD82	9Q-CAB	19-NOV-2009	GOMA A/P, CONGO (DEMOCRATIC REPUBLIC OF)
20091118B	B777-200	N209UA	18-NOV-2009	(NEAR) NEW MARKET, WEST VIRGINIA, U.S.A.
20091118A	F100	EP-CFO	18-NOV-2009	ISFAHAN-SHAHID BEHESHTI A/P, IRAN
20091112A	CANADAIR RJ100	5Y-JLD	12-NOV-2009	KIGALI, RWANDA
20091110A	ATR72-212A	VT-KAC	10-NOV-2009	MUMBAI-CHHATRAPATI SHIVAJI INTL A/P, INDIA
20091102A	MD90	N909DA	02-NOV-2009	PHOENIX, ARIZONA, U.S.A.

3.6 Using an Accident Record

The data stored for an accident is displayed on 7 tabs within the Accident Record page and on several additional web-pages accessible via buttons:

The screenshot shows the Accident Record page for 19850822A. At the top, there are 'User Functions' (Back to Results, Advanced Search) and 'Export Options' (various icons). The title is '19850822A, B737-236 Sr1, G-BGJL, MANCHESTER AIRPORT, U.K., 22-AUG-1985'. Below this is a 'Controls' section with buttons for TEXT, PICTURES (5), INJURY LOCATIONS (1), EXIT USAGE (1), EXIT & ASSIST MEANS (8), ORIENTATION (1), OCCUPANT DATA (139), FLOATATION (0), KEYWORDS (7), LINKS (0), and REPORTS (1). A link to the FAA Lessons Learned Database is also present. Below the controls is a 'Records' section with a navigation bar showing '7 of 7' and a link to the record. The main content area has seven tabs: ACCIDENT DETAILS, AIRCRAFT DATA, INJURY TABLE, FIRE FACTORS, IMPACT FACTORS, WATER FACTORS, and ENVIRONMENT. The 'ACCIDENT DETAILS' tab is active, showing a table of accident information.

Records 7 of 7 Link to this record : <http://www.rgwcherry-adb.co.uk/adb2/ADBview.asp?REF=19850822A>

ACCIDENT DETAILS	AIRCRAFT DATA	INJURY TABLE	FIRE FACTORS	IMPACT FACTORS	WATER FACTORS	ENVIRONMENT
REFERENCE	19850822A					
IDENTIFIER	MANCHESTER B737					
AIRCRAFT TYPE	B737-236 Sr1					
WEIGHT CATEGORY	C					
REGISTRATION	G-BGJL					
DATE	22-AUG-1985					
LOCATION	MANCHESTER AIRPORT, U.K.					
OPERATOR	BRITISH AIRTOURS					
OPERATION	PASSENGER					
REPORT	AAIB ACCIDENT REPORT 8/88					
NUMBER OF OCCUPANTS	137					
FATALITIES	55					
INJURIES	15					
FIRE RELATED	YES					
DITCHING RELATED	NO					
IMPACT RELATED	NO					
FUSELAGE RUPTURED	NO					
FUEL TANK RUPTURED	YES					
DAY / NIGHT	D					
RUNWAY VICINITY	YES					
PHASE OF FLIGHT	ABORTED					
OVERRUN	NO					
AIRCRAFT DAMAGE	DESTROYED					
EVACUATION	YES					


1. To display accident data within the tabs, click on the relevant tab.
2. To display accident data on the additional web-pages click on the relevant 'Controls' button.
3. To view the next or previous Accident Record in the Accident List click on the 'Forward/Back' control:


Record 3 of 3926

3.7 Simple Search

A simple search can be carried out to identify and display accidents that meet user defined criteria.

1. Go to the Accident List (see 3.3)
2. Enter the appropriate details into the Reference, Year Range or Location boxes within the search controls:

REFERENCE contains 

YEAR RANGE between 1980 and 2000 











LOCATION contains

Simple Search

(7) Search Results For : [LOCATION = manch]

3. Click on the 'Search Above' button to display the revised Accident List containing only the accidents that meet the search criteria.

Example: The search criteria entered above are for identifying accidents that occurred at Manchester during the period 1980 to 2000. This results in the following Accident List:

Page   1   of 1 Records 1 to 2 of 2 Page Size 20 ▼					
REFERENCE /	AIRCRAFT TYPE	REGISTRATION	DATE	LOCATION	
19950427A	MD83	G-DEVR	27-APR-1995	MANCHESTER AIRPORT, U.K.	
19850822A	B737-236 Sr1	G-BGJL	22-AUG-1985	MANCHESTER AIRPORT, U.K.	
Page   1   of 1 Records 1 to 2 of 2 Page Size 20 ▼					

4. To clear the search criteria and display the full Accident List press the 'Reset/Show All' button.

3.8 Advanced Search

An advanced search can be carried out to identify accidents that meet user defined criteria. An advanced search is carried out using the Advanced Search page:

Advanced Search

[Back](#) [Search](#) [Reset](#)

REFERENCE	contains	<input type="text"/>
IDENTIFIER	contains	<input type="text"/>
AIRCRAFT TYPE	contains	<input type="text"/>
WEIGHT CATEGORY	=	Please Select
REGISTRATION	starts with	YA-* : Afghanistan YT-* : Algeria DZ-* : Angola CR-L* : Angola
YEAR RANGE	between	<input type="text"/> and <input type="text"/>
LOCATION	contains	<input type="text"/>
COUNTRY	=	Please Select
OPERATOR	contains	<input type="text"/>
OPERATION	=	Please Select
FIRE RELATED	contains	Please Select
DITCHING RELATED	contains	Please Select
IMPACT RELATED	=	Please Select
PHASE OF FLIGHT	=	Please Select
AIRCRAFT DAMAGE	=	Please Select
EVACUATION	=	Please Select
NUMBER OF ENGINES	=	Please Select
ENGINE CONFIGURATION	=	Please Select
ENGINE TYPE	=	Please Select
WING CONFIGURATION	=	Please Select
NUMBER OF AISLES	=	Please Select
MAXIMUM SEATS PER ROW	=	Please Select
SEAT CATEGORY	=	Please Select
TYPE CERTIFICATED SEAT CATEGORY	=	Please Select
OCCUPANT INJURIES	=	Please Select
MAIN WEATHER CONDITIONS	=	Please Select
EXITS	contains	Please Select
ASSISTS MEANS FITTED	contains	Please Select
TEXT	contains	<input type="text"/> and <input type="text"/> or <input type="text"/> contains <input type="text"/>
CONTAINS TEXT	=	<input type="checkbox"/>
CONTAINS PICTURES	=	<input type="checkbox"/>
CONTAINS INJURY LOCATION DIAGRAMS	=	<input type="checkbox"/>
CONTAINS EXIT USAGE DIAGRAMS	=	<input type="checkbox"/>
CONTAINS OCCUPANT DATA	=	<input type="checkbox"/>
CONTAINS EXIT AND ASSIST MEANS DATA	=	<input type="checkbox"/>
CONTAINS OFFICIAL ACCIDENT REPORTS	=	<input type="checkbox"/>
KEYWORD	=	Please Select

[Search](#) [Reset](#)

1. To display the Advanced Search page go to the Accident List (see 3.3) and click on the 'Advanced Search' button.
2. Enter the appropriate search criteria into the text boxes or via the drop down lists. Click on 'Search' to display the revised Accident List containing only the accidents that meet the search criteria:
3. Clear the search criteria before commencing a new search by clicking the 'Reset' button.

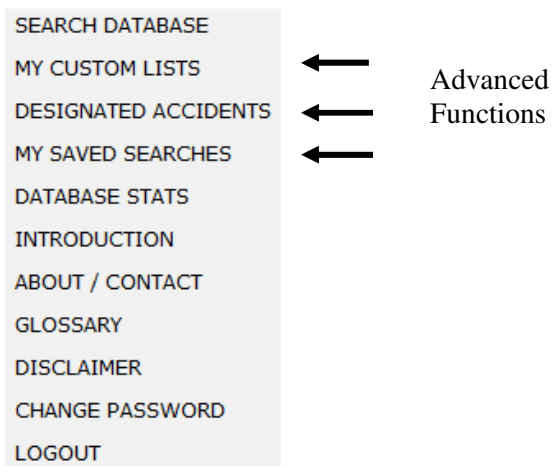
4 Using the Database - Advanced Features

The advanced features of the database are available after registering.

To register, click on the “click here” link at the top right hand corner of the accident list.

Want to save your Searches or create Custom Lists then [click here](#) to register

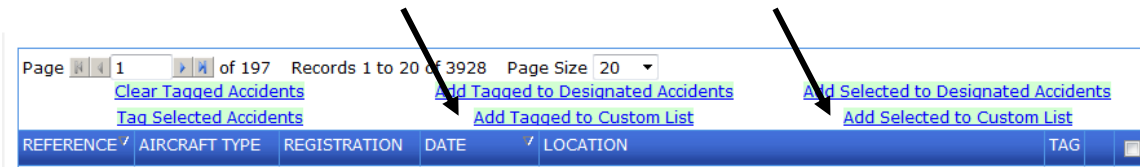
To use the advanced features the user is required to Login with the Username and Password chosen during registering. A main menu is displayed, containing the additional ‘Advanced’ functions – My Custom Lists, Designated Accidents and My Saved Searches:



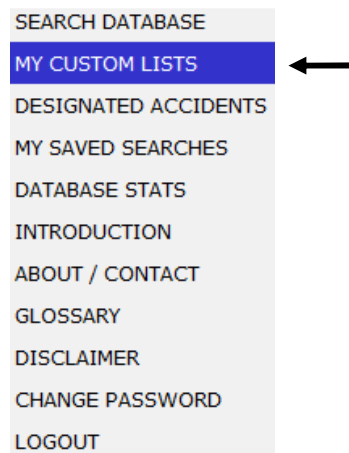
4.1 My Custom Lists

The Custom List feature allows the user to create and save a list of accidents of particular interest. The Custom List can be amended by adding or subtracting accidents whilst navigating through the database. The Custom List can be exported and saved as a text file containing the accident reference numbers. Many such text files can be created for different Custom Lists. Any of the saved Custom Lists may be imported into the database. Only one Custom List can be active on the database at any time. The Custom List will stay active for 6 months from creation or amendment.

1. To add an accident to the active Custom List when viewing an Accident Record, click the 'Add to Custom List' button:
2. Alternatively, to add an accident to the active Custom List when viewing an Accident List, click on 'Add Tagged to Custom List' or 'Add Selected to Custom List' depending on whether the accident has been Tagged (see section 4.4) or Selected:



3. To view the list of accidents contained in the active Custom List, click on 'My Custom Lists' in the main menu:



The active Custom List is displayed along with user controls:

Custom Lists

This function gives you the ability to select a custom range of accidents to either export or search through. You can only have one list active and the contents of which will stay active for 6 months.

Using the import function will merge any accidents in your current list with the contents of the imported file.

User Controls

⊕ Search

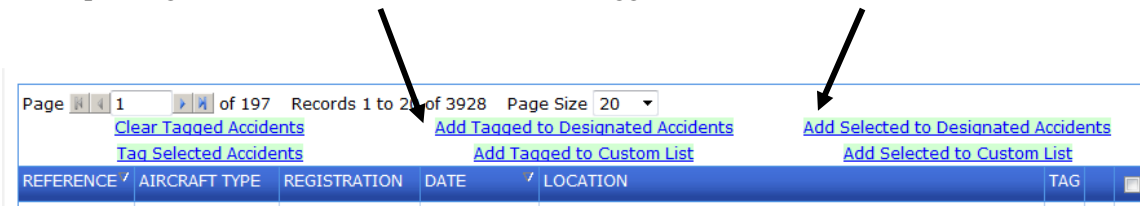
Page 1 of 1	Records 1 to 9 of 9	Page Size 50
Add		Delete Selected Records
REFERENCE	DATE ADDED	Select All
20091222A	15/3/2011	<input type="checkbox"/>
20091220A	15/3/2011	<input type="checkbox"/>
20040617A	15/3/2011	<input type="checkbox"/>
20030131A	15/3/2011	<input type="checkbox"/>
20011112A	15/3/2011	<input type="checkbox"/>
20010513A	15/3/2011	<input type="checkbox"/>
20000927A	15/3/2011	<input type="checkbox"/>
19971222B	15/3/2011	<input type="checkbox"/>
19970926B	15/3/2011	<input type="checkbox"/>
Page 1 of 1	Records 1 to 9 of 9	Page Size 50
Add		Delete Selected Records

4. To export the active Custom List, click on 'Export as Text File'. The list of reference numbers will be added to Notepad. Save the Notepad file.
5. To import a Custom List, click on 'Import Text File'. Browse for the required file and click on 'Upload'.
6. To use the Custom List, click on 'Use Custom List'. An Accident List will be displayed containing only the accidents within the active Custom List.
7. To delete an accident from the active Custom List, when viewing the Accident List, click on 'Modify List', select the relevant accident from the Custom List and click on 'Delete Selected Records'.
8. To delete an accident from the active Custom List, when viewing an Accident Record, click on 'Delete from Custom List'.
9. To Exit from the active Custom List click on 'Exit List'.

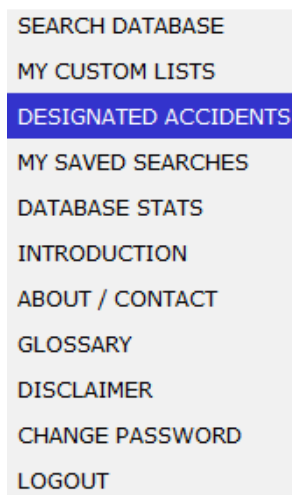
4.2 Designated Accidents

The Designated Accidents feature allows the user to create and save a selection of accidents of particular interest. The Designated Accidents selection can be amended by adding or subtracting accidents whilst navigating through the database.

1. To add an accident to the Designated Accidents when viewing an Accident Record, click the 'Add to Designated Accidents' button:
2. Alternatively, to add an accident to the Designated Accidents when viewing an Accident List, click on 'Add Tagged to Designated Accidents' or 'Add Selected to Designated Accidents' depending on whether the accident has been Tagged or Selected:



3. To view the list of Designated Accidents, click on 'Designated Accidents' in the main menu:



4. To delete an accident from the Designated Accidents when viewing the Accident List, click on 'Modify List', select the relevant accident from the Custom List and click on 'Delete Selected Records'.





4.3 My Saved Searches



The My Saved Searches feature allows the user to save search criteria for future use. (Note: Unlike a Custom List, the accidents displayed may vary depending on changes made to the database content.)

1. To save the current search criteria, carry out a search then click on 'Save Search' within the 'Accident List' then add a Name for the search and click 'Add'
2. To display Saved Searches click on 'My Saved Searches' from the main menu:



The list of Saved Searches is displayed:

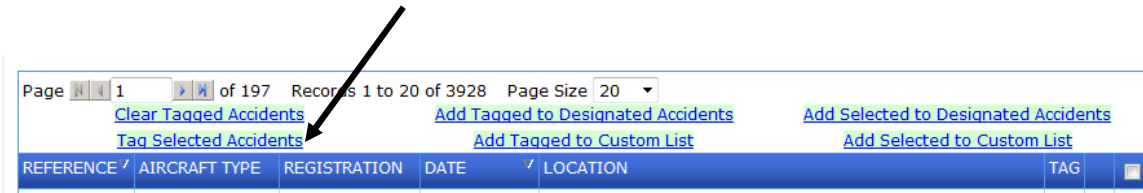
Page 1 of 1		Record 1 to 2 of 2		Page Size 20	
SEARCH NAME (*)	SEARCH DATE				
B737	25/7/2011				
British	25/7/2011				

3. To recall a Saved Search, click on the relevant search name in the list of saved searches.
4. To delete a Saved Search, click on the delete symbol  for the relevant accident within the list of saved searches.
5. To edit the name of the search, click on the edit symbol  for the relevant accident within the list of saved searches.

4.4 Tagging

The Tagging feature provides a method of highlighting chosen accidents. The Tagged accidents can then be sorted to the top of the Accident List, added to the Custom List or added to Designated Accidents. Tagged accidents are saved at the end of a session and will appear in a new session.

1. To Tag an accident when viewing an Accident Record, click the 'Tag Accident' button:
2. Alternatively, to Tag an accident when viewing an Accident List, click on 'Tag Selected Accidents'.



3. To clear all Tagged Accidents click on 'Clear Tagged Accidents' when viewing the Accident List.

5 Content of Database

The data in the database must only be considered as a guide for further research and must not be considered as definitive.

The database contains numerous fields, which for most accidents are not utilized, since the necessary level of detail is not available.

This Section of the User Guide describes the content of each of the database fields and any codes utilised.

The database field descriptions are presented in groups (shown below) corresponding to the viewing screens accessed by clicking on the relevant tabs or control buttons.

- Accident Details
- Aircraft Data
- Injury Table
- Fire Factors
- Water factors
- Environment
- Textual Data
- Pictures
- Injury Location Diagram
- Exit usage Diagram
- Exit and Assist Means
- Orientation
- Occupant Data
- Floatation
- Keywords
- Links
- Official Accident Reports

5.1 General Conventions

Throughout the database the following convention is adopted:

- ? = data unknown
- = not applicable
- * = data removed (for confidentiality reasons)
- {xxx} = data from an unofficial source. (Data and curly brackets are shown in red.)

5.2 Accident Details

This section of the database contains basic information pertinent to the accident. The fields are as follows:

Reference

This field contains the unique reference number for the accident. The reference number is based on the date of occurrence of the accident. Hence an accident occurring on the 25th July 1991 would have the following code:

19910725A

The alpha-numeric code has been used to differentiate between accidents, should more than one occur on the same date. In this event subsequent accidents are annotated “B”, “C”, etc.

Identifier

This field is used where an accident is commonly known by an identifier or name. E.g. ‘MANCHESTER B737’ and ‘KEGWORTH B737’.

Aircraft Type

This field defines the aircraft type and series, e.g. B737-236

Weight Category

This field defines the weight category of the aircraft. The following categories of maximum take-off weight (MTOW) have been used:

- A = less than 12,500 lb
- B = 12,500 - 100,000 lb
- C = 100,000 lb - 250,000 lb
- D = 250,000 lb - 400,000 lb
- E = greater than 400,000 lb

Registration

This field contains the Registration of the aircraft.

Date

This field contains the date of occurrence of the accident. It takes the form 'dd-mmm-yyyy', for example 25-JUL-1991.

Location

This field contains details of the location of the accident site including the country.

Operator

This field contains details of the operator of the aircraft involved in the accident.

Report

This field contains the reference number of the official accident report.

Number of Occupants

This field contains the total number of occupants on board encompassing flight crew, cabin crew and passengers.

Fatalities

This field contains the total number of fatal injuries sustained during the accident.

Injuries

This field contains the total number of non-fatal serious injuries sustained during the accident.

Fire Related

This field contains YES or NO depending on whether the accident involved a fire.

Ditching Related

This field contains YES or NO depending on whether the accident involved planned or unplanned ditching.

Impact Related

This field contains YES or NO depending on whether the accident involved an impact. See Section 6 - Definitions.

Fuselage Ruptured

This field defines whether the fuselage was ruptured as a result of impact. “YES” indicates that the fuselage was ruptured as a result of impact; “NO” indicates that the fuselage was not ruptured as a result of impact.

Fuel Tank Ruptured

This field defines whether the fuel tank was ruptured as a result of impact. “YES” indicates that the fuel tank was ruptured as a result of impact; “NO” indicates that the fuel tank was not ruptured as a result of impact.

Day/Night

This field defines whether the accident occurred during the day or during the night. See Section 6 - Definitions. “D” indicates Day; “N” indicates Night.

Runway Vicinity

This field defines whether the accident took place within the vicinity of the airfield. See Section 6 - Definitions. “YES” indicates that the accident took place within the vicinity of the airfield; “NO” indicates that the accident did not take place within the vicinity of the airfield.

Phase of Flight

This field defines the phase of flight in which the accident occurred. The following defines the phase of flight in which injuries were sustained or there was potential for injuries. The following phases of flight have been used in the database:

Parked

The accident occurred whilst the aircraft was parked.

Taxiing

The accident occurred whilst the aircraft was taxiing.

Take-off

The accident occurred whilst the aircraft was taking off. If the cause of the accident was evident during an unaborted take-off but the aircraft became airborne then the phase of flight is given as take-off.

Aborted

The accident happened during an aborted take-off. An aborted take-off is considered to be an attempt to stop prior to the aircraft becoming airborne. If the flight is aborted after becoming airborne or it is not known whether the aircraft became airborne it is considered to be a take-off case.

Climb

The accident occurred whilst the aircraft was climbing.

Flight

The accident occurred whilst the aircraft was in flight.

Descent

The accident occurred whilst the aircraft was descending.

Approach

The accident occurred during the approach to land.

Go-around

The accident occurred during a go-around from a rejected approach.

Landing

The accident occurred during the landing phase.

Overrun

This field defines whether the accident involved the aircraft overrunning the runway. “YES” indicates that the aircraft overran the runway; “NO” indicates that the aircraft did not overrun the runway.

Aircraft damage

This field defines the extent of aircraft damage as a result of the accident. The aircraft damage is classified into the following categories:

DESTROYED
SUBSTANTIAL
MINOR
NONE

Evacuation

This field defines whether the accident involved an emergency evacuation (See Section 6 - Definitions). “YES” indicates that the accident involved an emergency evacuation; “NO” indicates that the accident did not involve an emergency evacuation.

5.3 Aircraft Data

This section of the database contains basic information pertinent to the aircraft. The fields are as follows:

Aircraft

This field defines the aircraft type and series, e.g. B737-236

Number of Engines

This field defines the number of thrust engines fitted to the aircraft.

Engine Configuration

This field defines the location of the thrust engines, e.g. WING for wing mounted engines.

Engine Type

This field defines the type of engine e.g. TURBO JET

Weight Category

This field defines the weight category of the aircraft. The following categories of maximum take-off weight (MTOW) have been used:

- A = less than 12,500 lb
- B = 12,500 - 100,000 lb
- C = 100,000 lb - 250,000 lb
- D = 250,000 lb - 400,000 lb
- E = greater than 400,000 lb

Wing Configuration

This field defines the wing configuration as either HIGH WING or LOW WING.

Number of Passenger Seats

This field defines the maximum number of passengers seats available in the cabin, irrespective of whether they were occupied.

Load Factor

This field is derived from dividing the number of passengers aboard by the number of passenger seats. If the number of passenger seats is estimated (indicated by being surrounded by square brackets), or unavailable, the field contains a question mark "?"

The load factor may be greater than 1.0 if laptop infants were onboard the aircraft..

Number of Aisles

This field defines the maximum number of aisles.

Maximum Seats per Row

This field defines the maximum number of passenger seats in a row not divided by an aisle.

Seat Category

This field defines the seat category of the aircraft. The following categories for the number of passenger seats fitted have been used:

<u>Category</u>	<u>Seats Fitted</u>
1	1-9
2	10-19
3	20-40
4	41-79
5	80-110
6	111-139
7	140-179
8	180-249
9	250-349
10	350-449
11	450-599
12	600+

Type Certificated Seat Category

This field defines the type certificated seat category of the aircraft. The following categories for the type certificated number of seats are used.

<u>Category</u>	<u>Seats Fitted</u>
1	1-9
2	10-19
3	20-40
4	41-79
5	80-110
6	111-139
7	140-179
8	180-249
9	250-349
10	350-449
11	450-599
12	600+

5.4 Injury Table

Total Aboard

This field contains the total number of occupants on board encompassing flight crew, cabin crew and passengers.

Number of Fatalities and Injuries

The database has a group of fields containing the number of fatalities, number of non-fatal serious injuries and number of minor/no injuries for the crew, passengers and total.

5.5 Fire Factors

This section of the database contains basic information pertinent to the fire for fire related accidents. The fields contained in this section are as follows:

Fire Related

This field defines whether the accident was fire or smoke related and defines the extent of the fire. The following codes are used:

F	= Fire Extent unknown
FSCE	= Fire and smoke internal and external to the cabin
FSC	= Fire and smoke internal to the cabin (may or may not include external fires)
FNN	= Fire other than in Cabin
S	= Smoke in Cabin (No Fire)
N	= No Fire or Smoke

Fire/Smoke External to the Aircraft

This field indicates whether there was a fire external to the aircraft. Fire external to the aircraft is annotated with “YES”; No fire external to the aircraft is annotated “NO”.

Ignition Source

This field gives details of the ignition source of the fire in a fire related accident. The following codes are used:

E	= Engine Debris
S	= Electrical System
I	= Impact
O	= Other

Fire Origin

This field gives details of fire origin in a fire related accident. The following codes are used:

E	= Engine
C	= Cabin Sidewalls
L	= Lavatories
B	= Baggage Bay
G	= Galley
F	= Fuel Tank
A	= Aircraft Equipment Bay
O	= Other

Fire Medium

This field gives details of the media involved in the fire. The following codes are used:

F	= Fuel
C	= Cabin Oxygen
T	= Therapeutic Oxygen
I	= Interior Materials
H	= Hydraulic Fluid
A	= Aerosol Cans
O	= Other

Fire Penetration of Cabin

This field gives details of the mechanism for fire penetration of the cabin. The following codes are used:

B	= Burnthrough
R	= Through impact ruptures in the fuselage
N	= No penetration of an external fire into the cabin
D	= Through doors

Combinations are used e.g. BR for a combination of burnthrough and ruptures.

Fuel Type

This field specifies the fuel type used on the aircraft involved in the accident.

Hydraulic Fluid Type

This field specifies the hydraulic fluid type used on the aircraft involved in the accident.

Standard of Cabin Materials

This field specifies the requirement standard applicable to the cabin materials. If the accident is not fire related then the field is annotated with “-”.

Seat Blocking fitted

This field specifies whether seat blocking layers were fitted to the aircraft involved in the accident. If seat blocking layers were fitted this field is annotated with “YES”; If seat blocking layers were not fitted this field is annotated “NO”. If the accident is not fire related than the field is annotated with “-”.

5.6 Impact Factors

Percentage of Overhead Stowage Detached

This field specifies the percentage of the overhead stowage lockers that became detached and penetrated areas in which passengers might be struck. Overhead stowage detachment is only considered when it occurs as a result of impact, and not if it occurs as a result of fire.

Percentage of stowage non-retained

This field specifies the percentage of cabin baggage that is non-retained. Stowage non-retention is only considered when it occurs as a result of impact.

Galleys

This field specifies whether galley disruption occurred as a result of the impact. The following codes are used:

D	= Galleys Disrupted
R	= Galleys Retained
N	= No Galleys fitted

Galley Contents

This field specifies whether the galley contents were uncontained as a result of the impact. The following codes are used:

D	= Galley Contents Uncontained
R	= Galley Contents Retained
N	= No Galleys fitted

Toilets

This field specifies whether toilet disruption occurred as a result of the impact. The following codes are used:

D	= Toilets Disrupted
R	= Toilets Retained
N	= No Toilets fitted

Wardrobes

This field specifies whether wardrobe disruption occurred as a result of the impact. The following codes are used:

D	= Wardrobes Disrupted
R	= Wardrobes Retained
N	= No Wardrobes fitted

Overhead Stowage

This field specifies whether overhead stowage disruption occurred as a result of the impact. The following codes are used:

D	= Overhead Stowage Disrupted
R	= Overhead Stowage Retained
N	= No Overhead Stowage fitted

Stowage Contents

This field specifies whether the stowage contents were uncontained as a result of the impact. The following codes are used:

D	= Stowage Contents Uncontained
R	= Stowage Contents Retained
N	= No Stowage fitted

Bulkheads

This field specifies whether bulkhead disruption occurred as a result of the impact. The following codes are used:

D	= Bulkhead Disrupted
R	= Bulkhead Retained
N	= No Bulkhead fitted

Floor Failure

This field specifies whether floor disruption occurred as a result of the impact. The following codes are used:

YES	= Floor Disrupted
NO	= No Floor Disruption

Seat Failure

This field specifies whether seat disruption (includes distortion or structural failure) occurred as a result of the impact. The following codes are used:

YES	= Seat Disrupted
NO	= No Seat Disruption

Peak "G" Level - Vertical

These fields indicate the peak "g" level encountered during the impact, as reported in the accident report, in the vertical axis.

Peak "G" Level - Lateral

These fields indicate the peak "g" level encountered during the impact, as reported in the accident report, in the lateral axis.

Peak "G" Level - Longitudinal

These fields indicate the peak "g" level encountered during the impact, as reported in the accident report, in the longitudinal axis.

5.7 Water Factors

Ditching Related

This field defines whether the accident was ditching related (See Section 6 for the meaning of Ditching Related in the context of this database) and defines the nature of the event. The following codes are used:

D	= Ditching - circumstances unknown
DP	= Ditching planned
DU	= Ditching unplanned
N	= Not ditching related

Aircraft Totally or Partially on Water

This field specifies whether the aircraft was totally or partially on water. If the aircraft was totally or partially on water the field is annotated with “YES”; If the aircraft was neither totally nor partially on water the field is annotated with “NO”.

Premeditated Ditching

This field specifies whether the accident involved a premeditated or planned ditching. If the accident involved a premeditated or planned ditching the field is annotated with “YES”; If the accident did not involve a premeditated or planned ditching the field is annotated with “NO”.

Damage Due to Impact with Water

This field specifies whether the aircraft pressure hull was penetrated as a result of impact with water. If the aircraft pressure hull was penetrated as a result of impact with water the field is annotated with “YES”; If the aircraft pressure hull was not penetrated as a result of impact with water the field is annotated with “NO”.

Damage Due to Impact with Ground

This field specifies whether the aircraft pressure hull was penetrated as a result of impact with ground prior to alighting on water. If the aircraft pressure hull was penetrated as a result of impact with ground the field is annotated with “YES”; If the aircraft pressure hull was not penetrated as a result of impact with ground the field is annotated with “NO”.

Distance of Aircraft from Shoreline

This field specifies the approximate distance of the aircraft from the shoreline in miles.

5.8 Environment

Injury External to the Aircraft

This field indicates whether injuries were sustained by the occupants external to the aircraft. “YES” indicates that injuries were sustained by the occupants external to the aircraft. “NO” indicates that injuries were not sustained by the occupants external to the aircraft.

Impediment to Rescuers by Meteorological Conditions

This field indicates whether rescuers were impeded by Meteorological Conditions. “YES” indicates that rescuers were impeded by Meteorological Conditions. “NO” indicates that rescuers were not impeded by Meteorological Conditions.

Impediment to Rescuers by Water or Fire

This field indicates whether rescuers were impeded by Water or Fire. “YES” indicates that rescuers were impeded by Water or Fire. “NO” indicates that rescuers were not impeded by Water or Fire.

Visibility

This field indicates the visibility at the scene of the accident. The “ Not Applicable” Category will apply when external visibility can have no effect on the survivability of the occupants (e.g. during an in flight occurrence). The following codes are used:

Good	= G	(Greater than or equal to 10 statute miles)
Moderate	= M	(Greater than or equal to 3 and less than 10 statute miles)
Poor	= P	(Greater than 0 and less than 3 statute miles)
Zero Visibility	= 0	

Precipitation

This field indicates the precipitation at the scene of the accident. The “ Not Applicable” Category will apply when precipitation can have no effect on the survivability of the occupants (e.g. during an in flight occurrence). The following codes are used:

Snow	= SN
Sleet	= SL
Rain	= R
Dry	= D

Wind

This field indicates the wind conditions at the scene of the accident. The “ Not Applicable” Category will apply when wind conditions can have no effect on the survivability of the occupants (e.g. during an in flight occurrence).

The following codes are used, preceded by the actual wind speed in knots where known (e.g. 37G):

Calm (less than 1 knot)	= C
Light (1 to 10 knots)	= L
Moderate (11 - 27 knots)	= M
Gale (28 - 47 knots)	= G
Storm (48 knots or more)	= S

Main Weather Conditions

This field summarises the prevailing weather conditions at the time of the accident. Options used are:

SNOW
SLEET
RAIN
DRY
CAT (Clear Air turbulence)
TURBULENCE
FOG
STORM

Other Weather Conditions

This field indicates the other weather conditions at the scene of the accident. The “ Not Applicable” Category will apply when the other weather conditions can have no effect on the survivability of the occupants (e.g. during an in flight occurrence). The following codes are used:

Clear Air Turbulence	= CAT
Turbulence	= TURB
Fog	= FOG
Storm	= S
Thunderstorm	= ST
Sandstorm	= SS
No other weather conditions	= N

5.9 Text

Text is taken directly from the source. Text, other than from official accident reports is in red font. Text is re-ordered under each of the following headings.

- Resume
- Impact
- Fire
- Evacuation
- Aircraft Factors
- Environmental Conditions
- Injuries to Occupants
- Conclusions

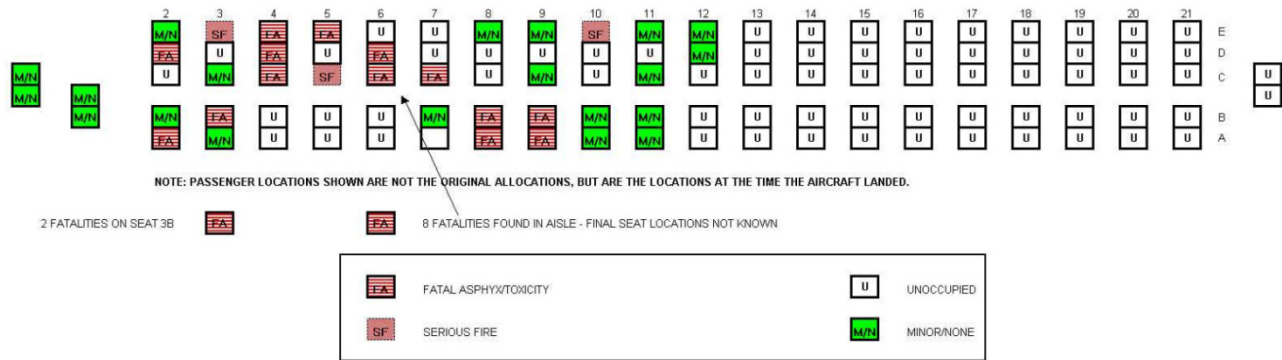
5.10 Pictures

This section of the database contains a selection of available scanned pictures and drawings pertinent to the accident for on-screen display.

5.11 Injury Locations

This section of the database contains a diagram of the injuries sustained by each occupant by seat position. Colour coding is used to define the injuries.

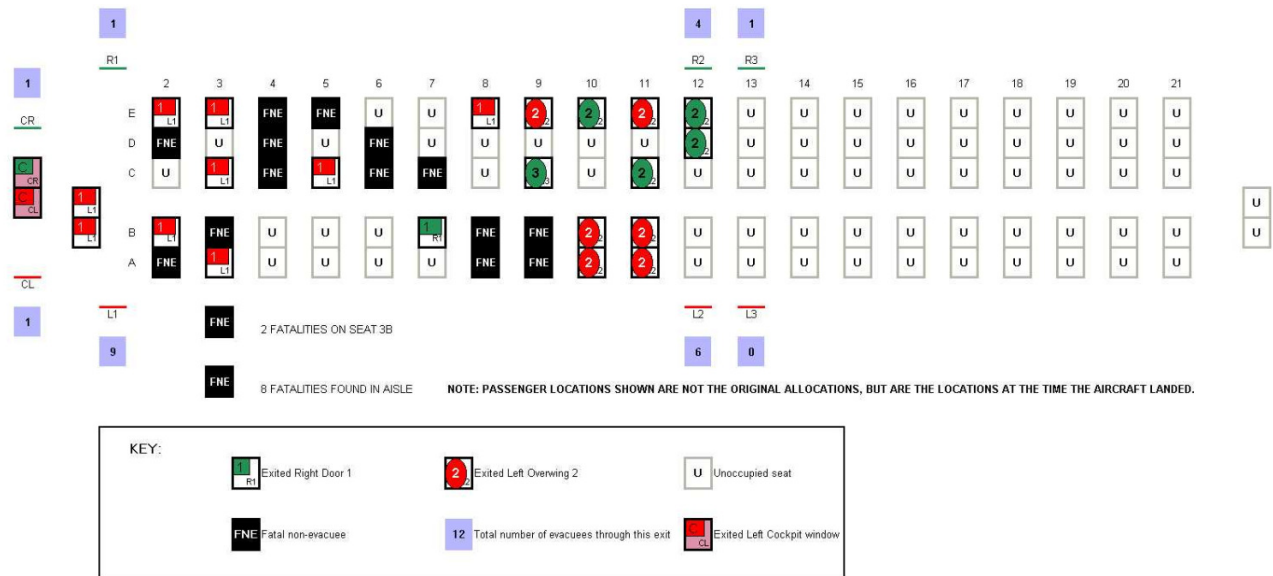
The following is an example of an Injury Location diagram.



5.12 Exit Usage

This section of the database contains a diagram of the exit used by each occupant by seat position. Each exit is assigned a number. Seats are labelled with the exit number and are coloured to reflect which side of the aircraft the occupant exited. Red indicates the seat occupant exited the left (port) side and Green indicates the seat occupant exited the right (starboard) side of the aircraft.

The following is an example of an Exit Usage diagram.



5.13 Exit and Assist Means

Exit Reference

This field references each of the exits. The emergency exits in the passenger cabin are annotated L for port and R for starboard, and are numbered from the front of the aircraft. (e.g. L2 relates to the second emergency exit in the passenger cabin from the nose of the aircraft on the port side.) The upper deck emergency exits in the passenger cabin are annotated. (e.g. UL2 relates to the second emergency exit in the upper deck passenger cabin from the nose of the aircraft on the port side.) Cockpit Escape Hatches are annotated C.

Who For

This field indicates for whom the exit is intended.

P = passenger

C = Crew.

Type

This field indicates the Type of exit as defined in FAR/CAR/CS 25.807. Codes used are:

I = Type I

III = Type III

HATCH = Cockpit sliding window or hatch

TAIL = Tail cone exit

Floor/ Non-Floor

This field indicates whether the exit is a floor level exit or a non-floor level exit. The following codes are used:

F = Floor Level Exit

N = Non-Floor Level Exit

Weight

For exits that require removal by the occupants to open, the weight of the exit is given in pounds.

Height

This field indicates the height of the exit in inches.

Width

This field indicates the width of the exit in inches.

Distance from Nose

This field indicates the relative disposition of the exits. Distances are measured from the nose of the aircraft to the centre line of the exit in inches.

Sill Height

This field indicates the distance from the door sill to the ground with the aircraft supported by the undercarriage for floor level exits, or the step down height for non-floor level exits. Dimensions are in inches.

Minimum Width in Aisle

This field indicates the minimum aisle width, in inches, from the referenced exit to the next nearest exit.

Minimum Width in Cross Aisle

This field indicates the minimum access dimension, in inches, for non-floor level exits.

It is measured from the front of the seat squab to the projected forward edge of the exit.

Width between seats

This field indicates the width between seats, in inches, for non-floor level exits.

It is measured from the front of the seat squab horizontally to the backrest of the seat in front.

Open attempted

This field indicates whether an attempt was made by occupants to open the referenced exit. The following codes are used:

A = Attempted to open Exit
N = No attempt to open Exit

Opened

This field indicates whether the referenced exit was opened by occupants. The following codes are used:

Y = Opened
N = failed to open
YD = Opened but with delay, restriction, or some other impediment to evacuation

Failed

This field indicates whether the referenced exit failed to open although an attempt was made to open it. The following codes are used:

N = Not failed
F = Failure due to frame distortion
M = Door mechanism failure
O = Operator inability to open
D = Opened but with delay, restriction, or some other impediment to evacuation

Obstructed (Exit)

This field is applicable to exits that were opened or attempted to be opened and indicates whether the referenced exit was obstructed. The following codes are used for the cause of the obstruction:

G = Ground
T = Trees
B = Buildings
W = Water
F = Fire
D = Interior Disruption
N = Not Obstructed

Number of occupants using exit

This field indicates the number of occupants that used the referenced exit to evacuate the aircraft.

Assist means fitted

This field indicates whether an assist means was fitted to the referenced exit. The following codes are used:

Y = Assist Means fitted
N = Assist Means not fitted

Deploy Attempted

This field indicates whether an attempt was made to deploy the assist means at the referenced exit. The following codes are used:

A = Attempted to Deploy
N = Not Attempted to Deploy

Deployed

This field indicates whether the assist means at the referenced exit was successfully deployed. The following codes are used:

D = Successfully deployed, inflated and useful as an assist means
N = Failed or Obstructed

Failed

This field indicates whether the assist means at the referenced exit failed, and if so, the mode of failure. The following codes are used:

N = Not failed
ND = Not failed but with some delay, restriction, or other impediment to evacuation
F = Failed to Deploy
I = Failure to Inflate
R = Failure to Remain Inflated

Obstructed (Assist Means)

This field indicates whether the referenced assist means was obstructed. The following codes are used for the cause of the obstruction:

G = Ground
T = Trees
B = Buildings
W = Water
F = Fire
D = Interior Disruption
N = Not Obstructed

5.14 Orientation

Section Reference

This field assigns a reference number to each of the sections of the aircraft bounded by major ruptures of the fuselage caused by impact.

Area between seat rows

This field indicates the size and location of each section of the aircraft, bounded by major ruptures of the fuselage, by providing the first and last seat row in each section. Where the section is terminated by the nose or tail N and T are used respectively. Hence:

- 17-24 would indicate that the referenced section contained seat rows 17 to 24 inclusive.
- N-12 would indicate the nose to seat row 12.
- 20-T would indicate seat row 20 to the tail
- N-N would indicate the nose only
- T-T would indicate the tail only
- N-T would indicate a whole cabin (no breaks)

Pitch, Roll, and Yaw Angle

This field indicates the pitch, roll, and yaw angle for each referenced section of the aircraft, in degrees.

The pitch angle relates to the angle made by the fuselage centre line to the horizontal. Pitch is positive nose up.

The roll angle relates to the angle made by the fuselage centre line to the vertical. Roll is positive to the right.

The yaw angle relates to the angle made by the fuselage centre line to the trajectory of the aircraft at impact. Yaw is positive to the right.

All angles are, measured in degrees, are approximate (to the nearest 10 degrees), and relate to the time of evacuation by the occupants.

Cause of Adverse Orientation

This field indicates the cause of the adverse orientation for each section of the aircraft. The following codes are used:

- T = Terrain
- W = Water
- G = Undercarriage Collapse

5.15 Occupant Data

This section of the database contains basic information pertinent to the occupants - passengers, cabin crew, and flight crew. The fields contained in this section are as follows:

Occupant Reference

The Flight Crew are identified as P1, P2, etc. (where P1 is the Captain). The Cabin Crew are identified in relation to their assigned exit. 1L3 would indicate the Cabin Crew member responsible for the L3 exit. If there were 2 Cabin Crew members located by this exit, and the second was not responsible for any exit they would be identified as 2L3. The passengers are identified by their seat position (e.g. 24F).

Type

The occupants are classified into the following types:

Flight Crew FC
Cabin Crew CC
Passengers PA

Name

The occupant names are not included in the database. This field is utilised solely as part of the data preparation process and all names are replaced with a * for data presentation purposes.

Age

The occupant age expressed in years. Adult ages are given to the nearest year. Infant ages are expressed as decimals.

Sex

The occupant sex is expressed as M for Male or F for Female.

Height

The occupant height expressed in inches.

Weight

The occupant weight expressed in pounds.

Infirmity

Passengers having any form of infirmity that may impair their evacuation capability are annotated with a “Y” all other occupants are annotated as “N” in this field.

Injury Code (Occupant Data)

Occupant Injuries are indicated by seven two digit codes indicating cause of injury and whether the injuries were sustained internally or externally to the aircraft. In the example shown in the Table below the occupant suffers Serious Injuries (S) as a result of the impact and Fatal Injuries (F) as a result of asphyxiation or inhaling toxic gases. The occupant sustained no injuries (N) from any of the other causes listed. All injuries were sustained internal (I) to the aircraft. Injuries sustained external to the aircraft would be annotated with (E). The code for the injuries sustained by the occupant illustrated in the table would be:

SIN N FIN N N.

CAUSE	INJURY	INJURY LOCATION
impact	S	I
mech. asphyx	N	
fire	N	
asphyx/toxic.	F	I
drown	N	
other	N	
unknown	N	

ISS Level

Occupant Injuries may be indicated by Baker's Injury Severity Score (ISS). The ISS is the sum of the squares of the highest AIS score in three different body regions (See Reference 10.1). ISS scores range from 1 to 75. The greater the number the higher the injury severity.

AIS Level

There are 9 fields available for indicating the Abbreviated Injury (AIS) Score for 9 areas of the body. The higher the injury severity the higher the AIS level. (See: "The Abbreviated Injury Scale" 1990 Revision - Association for the Advancement of Automotive Medicine.)

Exit Used

This indicates the exit used by the occupant.(e.g. 1L). Exit reference convention is contained in the Exit and Assist Means section of this User Guide.

N = Exit not used.

B = Exited through break in the wreckage

Seat Backs

This indicates whether the occupant traversed over the seat backs as an exit route. Use of seat backs is annotated with "Y"; seat backs not used is annotated "N".

Seat allocated

This field indicates the seat that the occupant was originally allocated, i.e. not necessarily the seat occupied at the time of the accident. It has the same annotation as *Occupant Reference*.

Seat Belt

This field indicates whether the occupant had their seat belt fastened at the time of the accident. Use of seat belts is annotated with “Y”; seat belts not used is annotated “N”.

Seat Impact Damage

This field indicates whether the occupants seat was damaged as a result of the impact. Damaged seats are annotated with “Y”; undamaged seats are annotated “N”.

Seat Standard/Class

This field indicates the classification of the seat. The coding used for class of seat is as follows:

E = Economy

B = Business

F = First

Seat Pitch

This field indicates the seat pitch between the occupants seat and the seat in front, or a bulkhead within headstrike distance, in inches. Seats or bulkheads not within headstrike distance are annotated “99”.

Number of seats to nearest aisle

This field indicates the number of seats from the occupants location to the nearest aisle. Hence an aisle seat would be annotated “0” and a window seat in a triple seat arrangement would be annotated “2”.

Aisle Width

This field indicates the minimum aisle width in inches from the occupants seat row to the nearest exit. Variations in aisle width are normally shown as a tolerance.

Floor Failure

This field indicates whether there was any disruption to the floor in the immediate vicinity of the occupants seat. Floor disruption is annotated with “Y”; no floor failure is annotated “N”.

Life Vest

This field indicates whether the occupant utilised a life vest. Use of life vest is annotated with “Y”; life vests not used is annotated “N”.

Life Raft

This field indicates whether the occupant utilised a life raft. Use of life rafts is annotated with “Y”; life rafts not used is annotated “N”.

5.16 Flotation

Section Reference

This field assigns a reference number to each of the sections of the aircraft bounded by major ruptures of the fuselage caused by impact (ground or water).

Flotation Time

This field specifies the estimated flotation time of the aircraft in minutes. If the occupiable area of the aircraft broke into sections, as a result of the impact (ground or water), the flotation time is given for each section of the aircraft.

Section Supported by Water

This field is annotated “Y” if the Section was supported by water, and “N” if not supported by water for ditching related accidents only.

5.17 Key Words

A number of keywords highlighting issues affecting occupant survivability may be stored with the database entry. These conform to the following list:

IMPACT - CRASHWORTHINESS OF SYSTEMS
IMPACT - INTERNAL DISRUPTION
IMPACT - FLOOR DISRUPTION
IMPACT - SEAT DETACHMENT / FAILURE
IMPACT - FUSELAGE RUPTURE
IMPACT - SEAT BELT
IMPACT - UPPER TORSO RESTRAINT
IMPACT - LOWER TORSO RESTRAINT
FIRE - FUSELAGE PENETRATION
FIRE - TOXICITY OF MATERIALS
FIRE - FLAMMABILITY OF MATERIALS
FIRE - FLAMMABILITY OF FUEL
FIRE - FLAMMABILITY OF SYSTEMS OTHER THAN FUEL
EVACUATION - EXIT ACCESS
EVACUATION - EXIT FUNCTIONALITY
EVACUATION - ASSIST MEANS
EVACUATION - FLOTATION MEANS

6 Definitions

Emergency Evacuation

An emergency evacuation carried out under the control, or partial control, of the crew.

Injuries

The generic term including Non-Fatal Serious Injuries and Fatal Injuries. (Refer to Annex 13 to the Convention on International Civil Aviation Aircraft 'ACCIDENT AND INCIDENT INVESTIGATION' for injury classifications.)

Runway Vicinity

An accident is considered to have occurred within the Runway Vicinity if egress or injury took place within the area under the control of the airport authorities or within easy reach of the airport firefighting services.

Ditching Related

An accident is considered to be Ditching Related if it involves a ditching (emergency landing on water) which is either planned or un-planned. An inadvertent water impact, which might occur during an overrun or undershoot, is also considered to be Ditching Related and is classified as an unplanned ditching. A non-survivable impact with water, for example an impact resulting from an uncontrolled descent from high altitude, is not considered to be Ditching Related.

Impact

Impact related includes an impact experienced by the aircraft and/or occupants. (This includes turbulence.)